

DOCKET NO. NOKI14-00006

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : Olli Piirainen  
International Application No. : PCT/EP99/01618  
International Filing Date : 10 March 1999  
Title : ESTIMATION OF DOPPLER SHIFT  
COMPENSATION IN A MOBILE  
COMMUNICATION SYSTEM

Box PCT  
Commissioner for Patents  
Washington, D. C. 20231

Sir:

PRELIMINARY AMENDMENT

Please amend the above-identified patent application as follows:

## IN THE CLAIMS:

Please cancel claims 1-11 and substitute therefor, claims 12-22 as follows:

12. A system for generating a Doppler correction factor for compensating for Doppler shift in a signal transmitted between a mobile station and a base station in a mobile communication system, the system comprising:

a channel impulse response determination circuit for determining a channel impulse response for the channel on which the signal is received;

reference circuitry for generating a reference vector from a set of known symbols and the channel impulse response;